

Amendments to the Claims:

Please amend the claims as follows.

1. (currently amended) A processing apparatus comprising:

a process chamber made of metal for applying a process to an object to be processed placed in the process chamber by supplying a process gas to the object to be processed;

a placement stage made of ceramics or a metal matrix composite located inside the process chamber so that the object to be processed is placed thereon;

a heating device incorporated into the placement stage;

a support member made of a metal matrix composite for supporting said placement stage;

a seal member located between the support member and a sidewall of said process chamber; and

a cooling mechanism located in a vicinity of the seal member so as to cool said seal member,

wherein said support member is connected to said sidewall of said process chamber and configured and arranged to serve as a bottom plate of said process chamber as the entire bottom surface of the process chamber, said placement stage is directly joined to said support member.

2. (previously presented) The processing apparatus as claimed in claim 1, wherein said support member is joined to a surface of said placement stage opposite to a surface on which the object to be processed is placed.

3. (previously presented) The processing apparatus as claimed in claim 1, wherein said support member has a substantially flat shape, and an entire surface of said placement stage opposite to a surface on which the object to be processed is placed is joined to a flat surface of said support member.

4-5. (canceled)

6. (previously presented) The processing apparatus as claimed in claim 1, wherein said cooling mechanism includes a coolant passage formed in said support member.

7. (previously presented) The processing apparatus as claimed in claim 1, wherein said cooling mechanism includes a coolant passage formed in said sidewall of said process chamber.

8. (previously presented) The processing apparatus as claimed in claim 1, wherein said placement stage is joined to said support member by brazing.

9-10. (canceled)

11. (previously presented) The processing apparatus as claimed in claim 1, wherein said support member has an opening to lead electrodes or power supply lines, which extend from said placement stage, out of said process chamber.